Technical Data Sheet

Purified Mouse Anti-Human CD56

Product Information

559043
N-CAM
0.2 mg
1.0 mg/ml
NCAM16.2
Mouse (BALB/c) IgG2b, κ
QC Testing: Human
V NK60
Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

Anti-N-CAM-16 monoclonal antibody (clone NCAM16.2) CAMFolio™ recognizes the third extracellular immunoglobulin-like domain common to three molecular weight forms (120-, 140-, and 180-kD) of the neural cell adhesion molecule (N-CAM). The N-CAM glycoprotein is expressed on many different cell and tissue types including natural killer (NK) lymphocytes, a subset of T lymphocytes and interleukin-2 (IL-2)-activated thymocytes, and neural, neuroendocrine, and degenerating of diseased muscle tissue.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at 4°C.

Application Notes

Application							
Flow cytometry	Routinely Tested						
Functional assay	Reported						
Immunoprecipitation	Reported						
Immunohistochemistry-frozen	Reported						
ELISA	Reported						

Recommended Assay Procedure:

Functional Studies: N-CAM is expressed on many cell and tissue types including neural tissue, developing and diseased smooth and cardiac muscle, NK lymphocytes, and a small percentage of T lymphocytes. Anti-N-CAM-16 monoclonal antibody (clone NCAM16.2) can be used with other anti-cell adhesion molecule monoclonal antibodies to better understand the role of N-CAM in nervous system inflammation and tumor cell metastasis. This antibody has been used with monoclonal antibodies to integrins αL , $\alpha 4$, $\beta 1$, and $\beta 2$, ICAM-1, VCAM-1 and E-selectin, and other monoclonal antibodies to N-CAM to study mononuclear leukocyte adhesion to neuroblastoma and cortical neural cells. NK lymphocytes and the subset of T lymphocytes that express N-CAM are unique in their ability to mediate direct, non-major histocompatibility complex-restricted cytotoxicity against certain tumor cells.

Immunoprecipitation: Anti-N-CAM-16 monoclonal antibody (clone NCAM16.2) immunoprecipitates N-CAM from human brain, KG-1a cells, leukemia cells, and N-CAM-expressing neuroblastoma cells. Immunohistology: Anti-N-CAM-16 monoclonal antibody (clone NCAM16.2) can be used for staining of frozen or paraffin-embedded sections of human or rat neural and skeletal muscle tissues by indirect immunofluoresscence or immunoperoxidase metods, or staining of cultured LAN-1 human neuroblastoma cells by indirect immunofluorescence.

Enzyme-linked immunosorbent assay (ELISA)/Radioimmunoassay (RIA): Anti-N-CAM-16 monoclonal antibody (clone NCAM16.2) can be used in an ELISA to detect N-CAM in brain extracts.

Suggested Companion Products

Catalog Num	Catalog Number		Name				Size	Clone
555740	Purified Mouse IgG2b κ Isotype Control			Purified Mouse		0.1 mg	27-35	
555988		FITC Goat Anti-Mouse IgG/IgM				0.5 mg	Polyclonal	
BD Bioscie	nces							
United States 877.232.8995	Canada 888.259.0187	Europe 32.53.720.550	Japan 0120.8555.90	Asia Pacific 65.6861.0633	Latin America/Caribbean 55.11.5185.9995			S RD



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Product Notices

- 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References

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